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ABSTRACT

Two ninth-grade classrooms and the dynamics between the social organization of the classroom and the teaching of subject matter were studied. A general mathematics and a social studies class, both geared for the academically deficient, were observed during one academic year. Observations focused on student and teacher behavior in the two classes and on the events, both social and academic, to which students and teachers reacted. The two teachers differed in their goals, expectations, and classroom organizational structures. The mathematics teacher's goals focused on the students' general knowledge and attitudes about the specific subject matter, while the social studies teacher's goals were oriented toward general skills that were applicable to most subjects. The social studies teacher viewed the students' learning problems and limitations as "end-point factors" -- factors that prohibited the teacher from teaching or focusing more on subject matter. The mathematics teacher treated these problems and limitations as "beginning-points" -- the place to begin planning and instruction. The mathematics teacher supported students as he worked directly with them, and he encouraged them to attempt higher level tasks. The social studies teacher attempted to gain student cooperation and participation by reducing the level of risk in any task through giving answers to the students and making classroom work easy. The differing goals and expectations of the teachers influenced their choices and the depth to which they could present subject matter. The relative positions of the subject matter and the social organization in the two classrooms affected the students' opportunities to learn. (JD)



Research Series 'No. 114

WHERE IS THE SUBJECT MATTER?:
HOW THE SOCIAL ORGANIZATION
OF THE CLASSROOM AFFECTS TEACHING

Arlene Anang Perry Lanier U.S. DEPARTMENT OF EDUCATION ANATIONAL INSTITUTE OF EDUCATION EOUCATIONAL RESOURCES INFORMATION CENTER. (FRIC)

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Abstract

Teaching is a dynamic process comprised of various interactions that together create an environment for learning. This paper describes the events in two ninth-grade classrooms, how they were interpreted by the teachers and students, and what are the dynamics between the social organization of the classroom and the teaching of subject matter. 'Specifically, a general-mathematics class and a social-studies class were observed during one academic year. Five students were members of both classes that were geared for the academically deficient. Teachers' goals and expectations for the year and for particular lessons were solicited and their perceptions, evaluations, and reflections on lessons and classroom events were recorded. Students that were enrolled in both classes were interviewed to obtain their perceptions and understandings of subject matter, classroom events, their own learning patterns, and the teacher's intentions. The two teachers differed in their goals, expectations, classroom organizational structures and ways of getting students to cooperate and participate. These factors influenced the teachers' choices, depth to which they could present subject matter, and the messages subsequently communicated to students. The relative positions of the subject matter and the social organization in the two classrooms affected the students' opportunities to learn.

WHERE IS THE SUBJECT MATTER?: HOW THE SOCIAL ORGANIZATION OF THE CLASSROOM AFFECTS TEACHING

Arlene Anang and Perry Lanier²

What is it that actually happens in classrooms and how do events there affect the teaching process and the presentation of subject matter? How do the goals and expectations of teachers affect the way subject matter is presented in the classroom environments? Are there some kinds of differences in interactions and social organization of classrooms that work either for or against the teaching and learning of subject matter?

This paper describes what went on in two high school classrooms, how events were interpreted from the perspectives of 10th teachers and students, and examines the dynamics between the social organization of a classroom and the teaching of subject matter. The descriptions will show how students and teachers interacted in the classrooms and how these interactions affected the instructional behaviors of the teachers.

A basic assumption of this study is that teaching is a dynamic process consisting of various interactions that together create an environment for learning. We also assume that the process must be



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viewed from the perspective of those who create and those who perpetuate the environment (i.e., the teachers and students), before suggesting ways to change it.

The Study

Data for the study were gathered during one academic year in two ninth-grade classrooms—a general mathematics class and a social studies class. Students judged to have academic deficiencies were assigned to these classes; teachers and administrators deemed that a specialized, segregated class could best fulfill their needs. The teachers and the subject matter of the two classes differed, but five students were members of both classes.

The researcher, a participant-observer in these two classrooms, visited the classes once or twice a week during the 1979-1980 academic year. The data consist of extensive field notes, including records of seating patterns, assignments, grades, time frames, and the talk and behavior of both teachers and students. The observations focused on student and teacher behavior in the two classes and the series of events, both social and academic, to which students and teachers reacted. The data also include formal and informal interviews with teachers and students. The focus of the teacher interviews was to record (1) the teachers' goals and expectations for the entire school year as well as for various lessons and (2) their perceptions, evaluations, and reflections of the lessons and various events that took place. The focus of the student interviews, with those who were enrolled in both of the classes, was to record their perceptions and understandings of the subject matter, various events, and their own learning patterns, as well as their perceptions of the teachers'



intentions. The purpose of using participant-observation and interviewing was to try to understand the context of the events--the understandings, attitudes, former experiences, and expectations--that the various participants brought to these events, and how these aspects of context influenced and shaped the daily occurrences.

The Mathematics Class

The mathematics class, called Foundations of Mathematics, was one of three alternatives available for ninth graders perceived by teachers to be "low-ability" or "skill-deficient." A low student enrollment (from 8 to 18 students during the period of observation) characterized the class, the rationale being that the teachers could thereby meet student's individual needs, give them maximum attention, and maintain reasonable control over students with problem behaviors.

The mathematics teacher was a white male who taught only this class and who spent the remainder of his working day teaching and doing research in mathematics education at a nearby university. He was characterized as "easy going" and "easy to get along with" by his colleagues. He maintained relationships with students outside of class, usually related to sporting events, joked easily with them, and was generally considered very open and straightforward with them.

Most of the students in the classroom were white, reflecting the total school population. Only a small percentage of the school population was black or hispanic. However, approximately twice as many boys as girls were enrolled in the class at any one time. This was the only high school in a town dominated by a major university, and



it had an excellent reputation in academics, sports, and innovative programs.

At the beginning of the year, the students generally chose to sit alone or in pairs spread out in a room big enough for over 30 pupils. At least one pair of students demanded much attention due to their poor behavior. Several other students who sat alone could become hostile with little provocation.

by the end of the year, all but two students regularly sat close together on one side of the room and toward the front. Seating changes corresponded to changing patterns of behavior and also to the fact that students often worked together during the portions of each class hour that were spent on topical or skill worksheets. By year's end most of the hostility had ceased; the teacher was less overt about student behavior management, although he still felt it necessary to constantly monitor several students.

A typical class hour consisted of some pre-lesson conversation among students or between teacher and students. While the teacher was getting organized for class and taking role, he often talked to one or more students about such things as local or national sporting events and their outcomes, school events, or issues of general interest. The students sat on chairs or table tops in groups of twos or threes talking quietly. No bells marked the beginning or ending of class hours; class began when the teacher walked across the front of the room, closed the door, and said something in a "public voice" or of a structuring nature, such as, "There are really three things we have to do today—multiplication of fractions,..." Typical opening procedures consisted of the teacher (1) taking role, (2) asking aloud

for the whereabouts of missing class members, or (3) returning graded papers.

Usually, during the first part of the class, the teacher did a "board talk," which consisted of writing and explaining problems on the board. In recitation style, he would ask questions such as "How many fours would you expect in 60 rolls of the die?" which usually required short numerical answers from students. These questions and answers were often rapid-fire, with the teacher's dialogue punctuated by students' replies. During this time, the teacher attempted to minimize interruptions and emphasize the task at hand by dealing with any behavior problems as quickly as possible in order to focus both his and his students' attention on the demonstration at the board.

The "board talk" usually lasted from 10 to 20 minutes and was followed by a brief transition when the teacher passed out worksheets. The students would prepare for work by getting out their pencils and calculators. During the remainder of the class hour (usually about 30 minutes), the students did their worksheets and the teacher moved around the room, giving help to individuals and small groups. The students often helped each other and compared or checked their answers with other students while the teacher moved among them. The teacher's priorities for directing his movement were first, to ward off or control behavior problems by keeping potential problem-students oriented to the task; second; to give help when and where it was solicited by students; third, to give extended help where he thought it was needed; and fourth, to monitor everyone's progress.

The teacher's priorities on the task and subject matter were reflected in management comments made during this segment of activity. An example was "Hey, B., go back there (to your seat) so I can work with these people." The teacher helped individuals with their work by giving them alternative approaches, explanations, or methods of problem-solving. On some occasions, he would make comments of a supportive nature on a student's progress—"You must be almost there." Occasionally, he would respond to a student's question by asking him or her to look at the reasonableness of an answer to see if it made sense. If a student had been working on a problem for a period of time and was still having difficulty solving it, the teacher asked the student to explain what he or she had tried. Then the teacher would explain the error and let the student make corrections.

The teacher's stated goals were reflected in his daily planning and in the formal and informal interviews: that the students (1) learn some basic skills; (2) see the usefulness of the subject matter in the real world (applications); and (3) enjoy the subject and the class by giving the students what he called "interesting math problems that don't necessarily have to do with computing and calculation and adding, subtracting, multiplying, and dividing." These goals plus the teacher's collection of ideas and resources were the basis of the curriculum. He made up all of his own worksheets and tests, usually daily, using student's responses (attitudinal as well as demonstrations of understanding) to gauge his pace. He covered all of the skills and basic topics typical in a foundations-level course--division, fractions, decimals, and percents--usually in terms of "real work math" such as miles per hour, sales tax, and inflation rates. He also spent time

on what he called "neat math" or "interesting problems" with probability, ratios, calculators, and topics in geometry that are not commonly covered.

The Social Studies Class

The social studies class was one of two ninth-grade social studies classes available, the other being the "regular" section. Both sections were taught by the same person, a white male, who, like the mathematics teacher, had been described by colleagues as "easy going" and "easy to get along with." He, too, had a graduate degree and occasionally taught college—level courses. Likewise, he maintained out—of—school contacts with students through his sports interests, primarily tennis and jogging. The major difference between the two teachers was that the social studies teacher spent his entire work day at the high school, where he taught three different social studies classes as well as tennis, while the mathematics teacher usually spent only one hour there.

Both teachers had volunteered to teach these foundations—level courses. The mathematics foundations course had existed at the school for several years but the social studies foundations course was new this year. The social studies teacher had actually proposed the need for a low—level course to both the school and the district administration. Upon approval, he had designed the curriculum and taught the course. The number of students, ratio of males to females, and percentages of while, black, and hispanic students were similar to those of the math class. The social studies class however, had two male students with serious emotional problems who expressed a form and

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degree of deviant behavior that surpassed that observed in the math

The teacher described this course in—terms of the topics to be covered. He said, "This course consists of a short unit on history, an economics unit—primarily consumer economics, sociology, psychology, career education, and some library research skills, note taking, and so on. The second semester is on government, a unit mandated by the state and the school's social studies department." The topics were the same for all the ninth—grade social studies classes of this teacher.

Students were admitted into this special section upon the recommendation of the middle—school counselors, and as the teacher said, it "was designed for kids identified as having reading problems or general problems with learning skills—kids who would not be able to make it in a regular social studies class."

The teacher described his goals for this group in "several areas."

The first area was "skills" he wanted to work on. They consisted of vocabulary (as applied to each content area of discipline), writing, note-taking, and reading. He also wanted to help students develop

(1) responsibility for doing homework (at the beginning of the school year he was giving 10- to 15-minute assignments about twice a week); (2) social skills, such as contributing to discussions and listening to each other, so that students didn't repeat each other;

(3) library skills, such as finding the social studies materials; and (4) study skills, such as map reading, graphing, and historical themes that appeared in the weekly Scholastic magazine, Search. Since most of these students would be going into a "regular" American history



course the next year, one of the teacher's goals was "to get them ready to operate in a regular social studies class."

When asked how the foundations social studies differed from the regular ninth-grade social studies class, the teacher replied that the foundations class was "an abbreviated version" of the regular class. Although topics were the same, he had different expectations for the two groups according to their academic ability and their behavior.

First, the teacher stated that the reading load was different for the two groups and that he didn't expect the foundations class to read and interpret as much material.

Secondly, he "consciously tried to provide more variety with this group" because of their "short attention spans." He tried to plan at least three different activities each class hour. At the end of the school year he again said, "In a mechanical sense, it's imperative to have at least two, often three, distinct activities. Anytime that I locked them into, say, an outloud reading, however absorbing it is... however good the play happens to be that they are reading...even gore and sex and things that normally grab their attention...is not going to work. Occasionally, a film will hold them, if it's a 'Hollywood production' where there are pretty girls in it or something."

Third, the teacher stated that he "tolerates more in this class in the way of noise" and "allows more intimacy in terms of questions."

He said that this group of students would "ask questions about his personal life that would shock him if they came from kids in his other classes."

Before class began, the teacher would either talk to individuals from this or the previous class, run errands outside of the room, or



clean up from the previous class and get ready for this class. The students would come in, put their things down on unassigned desks, and then either go out of the room again or converse or play with classmates. The conversations, often loud, and the student movement in the classroom during this pre-class period produced a feeling of chaos or unruliness. Students' comments and conversations generally were not related to the class or subject matter. A few examples follow.

- 1. A student talked to the teacher and other students about why he didn't get a jeep for Christmas.
- 2. One student hit another, who then turned around and chased the first one up and down the aisles.
- 3. A student who was eating was told by the teacher that no food was allowed in the room. The student replied that the teacher ate in the room; then he passed some of the food to a classmate and they both continued to eat in spite of the teacher's further statement that it was against the school rules.

When the teacher was ready to begin teaching, he'd close the door. He frequently began by handing back graded work, sometimes making comments about it. This was the cue for students to end their conversations and get in their seats if they were not there already. If they didn't immediately quiet down, as was often the case, the teacher would say something such as, "Hey, the class is too big now, folks, for me to shout you down. I'm not in the mood and don't think I ever will be." On the other days he did "shout them down," and would begin the lesson by reading the schedule of activities written on the board and making additional comments about it in a voice louder than that of the students. Sometimes he used a directive such as "turn to page five of the magazine for what is called an 'atlas quiz'," or "put your name on the top of the sheet," or "okay, spelling test. Right now make sure your name is at the top."

Students made noise and comments frequently during the activity sequences. The teacher attempted to control this unsolicited and disruptive noise with management comments directed at the specific individuals. For example, during a spelling test the teacher pronounced the word "aptitude." One student said, "I got it wrong," and the teacher replied, "I'm sure glad we all know about it." On another occasion the teacher responded to a student who was talking too loudly by saying, "We can't stop this conversation because of you." On some days the students' noise continued throughout each activity segment, and intensified during transitions; other days the noise and comments were minimal, especially if the students were watching a movie or the teacher was reading to them. The teacher's management comments were similar throughout each segment, and intensified in frequency and loudness during transitions when he was passing out or collecting papers or materials.

One day, for example, during the transition between the students taking and the collection of the spelling tests, the teacher asked students to pair up for the reading of a sociological novel. As he passed out the books, he commented, "Hey...quiet...I'm getting tired of talking people down," followed by "you're making it take longer than it needs to. If you're talking out, it just makes noise." Then he began the next activity: "The name of the chapter is 'Busy Day.' I'll go over the answers to those questions (on the students' sheets related to that chapter) to review. It's been a couple of weeks." He still continued responding to student noise and comments by saying, "Listen you guys—if you have something to say, raise your hand."



All activities in the social studies class took place in a recitation of whole group structure with the teacher in front of the room directing activities, giving information, and managing questions. All student questions and teacher comments were public in nature, meaning that everyone in the class heard them. If a student asked a question about the content, the teacher usually repeated the question to the whole group. Any answers that came from the members of the group were usually repeated and then elaborated upon by the teacher. This pattern was also used if students were asked to write an answer on their study sheets.

The two or three activities covered each class hour were usually related by the name of the topic or unit. For example, one day during the psychology unit, the activities were a follow-up discussion of a film seen the previous day on death and dying focused primarily on emotional responses that had been evoked by the teacher during the film; a hand-cut on intelligence; a reminder to study the spelling words on the topic for homework; and an oral reading of a portion of the sociological novel that the teacher had been reading over the course of several weeks. The intent of the teacher was to complete this book before he began the next unit on sociology. Most activities related in this way to the name of the unit, but not necessarily to each other (e.g., the film was unrelated to the study sheet and reading):

During the end-of-year interview, the teacher stated (in answer to the question "What have you learned this year?"), "I've learned that there is a need to learn how to write questions in such a way or conduct discussions in such a way where they (the students) are called



upon without my assistance, to write the answer." He added that he would have liked them to be "called upon to put together information, synthesize it, or summarize it, or whatever, and that has not happened much." He lamented at the students' low level of thinking and their dependency upon him for answers and talked about the possibility of changing the group structure so that students could work on questions in small groups.

Differences in Social Organization Between the Two Classes

One of the major differences between the two classes was in how the teachers organized their instruction. The two teachers differed in their organizational structuring primarily in the kind and amount of student-teacher and student-student interactions that they allowed, encouraged, or promoted.

The mathematics class was divided into two segments: whole group, when the teacher was explaining and demonstrating concepts and procedures at the board, and individual seatwork, when the students had specific assignments to complete and the teacher moved around the classroom to keep them on task, provide individual help, and monitor their progress.

The social studies class was conducted as a whole group with recitation-style instruction much of the time. The teacher dominated both the pace of instruction and the presentation of the subject matter.

All students heard the same explanation of what to do and how to do it as well as the facts, procedures, or concepts to be learned. The beginning of each mathematics class also used whole-group structure.



The two organizational structures, whole group and individual seatwork, affected (1) the amount and kind of assistance the teachers could give to individuals, (2) the teachers' patterns of classroom control and (3) the classroom status system (Bossert, 1979).

In the social studies class during whole-group instruction, all the students were supposed to be involved in a single task. Both their behavior and the teacher's was observed by all present. When the teacher needed to orient both his pace and amount of knowledge imparted to the group as a whole, he was unable to deal extensively with individuals in either his explanations or in methods of student behavior control. Since the whole group could listen to every teacher-student interchange, the teacher had to minimize the impact of each disruption and show impartiality when calling on students and when dealing with individual needs or control problems. The social studies teacher seemed to be unable to give reasons or explanations about why something was so, or his rationale for student behavior for the sake of equity.

Whole group lessons also affect students' opportunities to ask certain kinds of questions, demonstrate their ability, or engage in "public" performances. Some students may be inhibited about asking questions or for extended explanations while the rest of the group is listening. On the other hand, other students wanted their performances to be public, either to show off their ability and gain teacher or peer approval or to gain attention for which the social studies teacher called their "cutesy, glib responses." At least one student in the social studies class managed to turn some large time segments into an arena for his "performances."



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By using the organizing structure of individual seat work rather than whole-group instruction, students in the mathematics class were occupied most of the time, and opportunities for public behaviors were replaced by extended opportunities for individual interactions between students and between the teacher and a student. The teacher could provide personalized explanations about subject matter or a student's behavior. The rest of the students did not have to wait for the teacher to further explain or direct them and could proceed independently, thereby giving them more time to devote to the task. Furthermore, interruptions from one or more students within the class-room or from outside the room did not have to concern the majority of the group.

Interviews with students reflected the importance they placed on the individualized help and explanations they received in the mathematics class. One student said "He's really explained a lot of new ways for me to do it and it's easy. He don't just do a little brief thing saying 'now this is this;' he'll come right to the table and talk to you. He won't stand up front." Another said, "If you don't understand the work, he'll try to use a different method."

As a result of the individualized sear work in the mathematics classroom, the teacher was able to establish and maintain individual relationships with the students. In the course of giving help or explanations to students as he moved around the classroom, he also joked with them or talked about off-task interests if time permitted. He was also able to learn more about how students were approaching their work and the processes they used to solve problems. This would

not be possible with a whole-group structure. In the social studies class and during the board-talk sessions in the mathematics class, the two teachers had to maintain authority and distance. The social studies teacher had only this one kind of relationship with his students and therefore his knowledge about what they were learning or how they were processing information was limited to test results and formal recitation replies.

Small-group or individualized seat work also provided time, which was not available in the more formalized whole-group recitation, for students to talk and work together. In the mathematics class-room, the students didn't take advantage of this at the beginning of the year. Several students sat alone and didn't interact with anyone except the teacher. Several others made a great deal of noise, interrupting and disturbing the teacher as well as other students. After the first two months, some of the noisy students became quieter and at least one of them left the school. The other students moved closer together and began working together, answering each other's questions, comparing answers and progress, demonstrating methods, and generally talking about the task at hand. The whole-group or recitation structure did not allow or encourage this kind of student cooperation.

Differences in Dealing with Subject Matter

The way the two teachers dealt with subject matter was influenced by their goals and expectations for these foundations-level classes and the ways they negotiated with students for cooperation and participation. Many of the differences between these two classes can be



traced back to the teachers' original goals and expectations for these foundations-level classes. The mathematics teacher had stated his goals: that the students (1) learn some basic skills, (2) see the usefulness of the subject matter in the real world (applications), and (3) enjoy the subject and the class. The social studies teacher described his goals in terms of "skills" he wanted to work on:

(1) vocabulary as applied to the various disciplines; (2) writing, note-taking, and reading; (3) responsibility for doing homework; and (4) social skills such as contributing to discussions and listening to each other. He described his more general goal as preparing these students to operate in the regular social studies class. The mathematics teacher's goals focused on the student's general knowledge and attitudes about the specific subject matter while the social studies teacher's goals were oriented toward general skills that were applicable to most subjects.

The social studies teacher's expectations for this group were different than for his regular group. He had different expectations about the amount of reading they could do, interpretations they could make, and their attention spans, and he geared his presentation of subject matter to those expectations. He frequently read to them or let them take turns reading aloud rather than letting them read silently. He gave them answers or extended the answers they came up with as a group. He planned at least three different activities for each class hour. He also said that he tolerated more from this class in the way of noise and amount of movement.

Other differences within these two classes were reflected in both the management comments and the opening-class statements by these



two teachers. The mathematics teacher spoke of concepts to be learned such as multiplication of fractions while the social studies teacher spoke of activities they would do during the hour, such as watch a movie or take a spelling test. The mathematics teacher's management comments generally reflected his priority of dealing with subject matter, such as "you gotta be quiet so I can talk to one person" or "if you's out out the answer it kind of ruins it for people I'm talking to." The social studies teacher's management comments generally reflected quiet for quiet's sake or his sake without any reference to how students' noise or comments affected the learning process. He said such things as "hey...quiet. I'm getting tired of talking people down" or "if you're talking out, it just makes noise."

Several of the students were in both classes, but the two teachers' expectations and treatment of them were very different. The social studies teacher viewed the students' problems and limitations as <code>end-points--factors</code> that prohibited him from teaching or focusing more on subject matter. The mathematics teacher treated these problems and limitations as <code>beginning-points--the</code> place to begin his planning and instruction.

The second major difference in the way the two teachers dealt with subject matter was in how they handled the ambiguity and risk of the classroom tasks. According to Doyle (1979), students need to reduce ambiguity and risk and to increase the probability and efficiency of task accomplishment. He said that students do this by mediating with teachers or negotiating for their cooperation and participation. Therefore, if teachers make the work easy and thus reduce



the risk of student error or ambiguity about what is required, the students will be more cooperative and will participate more often.

The mathematics teacher did three things that reduced ambiguity and risk in the tasks he asked students to do: (1) he fit the daily activities to the groups' needs and abilities, (2) he had a grading system that gave the students 30% control over their course grade for their cooperation and good behavior, and (3) he gave them a great deal of support as they worked. Students reported that this grading system, upon which 20% of the grade was based on good behavior and another 10% was based on cooperation and obeying school rules (such as coming to class regularly and on time); actually encouraged them to work harder. One student reported that in previous years he wasn't able to get good grades in mathematics no matter what he tried, but this year he was encouraged to make his good grades better by taking home worksheets and redoing them until he felt secure in his knowledge of the processes and operations that. were being presented in class. The mathematics teacher supported students as they worked by moving around the room and complimenting them on their achievement, willingly helping them in a variety of ways, re-explaining or letting them know if they were on the right track, and generally demonstrating a great deal of patience and interest in each student.

The mathematics teacher also encouraged students to attempt higherlevel tasks that would require a more generalized mathematical understanding. He teased them into rethinking answers or into expanding numerical answers into logical ones. He encouraged them to consider the reasonableness of their answer rather than settling on anything.



He assigned extra credit to those problems that required more complex operations or strategies so that students didn't have to risk a low grade for an incorrect answer.

In contrast, the social studies teacher attempted to gain student cooperation and participation by reducing the level of risk in any task by giving answers and making the work easy. He rarely tried to move the students' thinking beyond the simple memory level but instead cooperated with them by providing lists of things for them to memorize. Even very complex issues were reduced to memorizable facts, which he provided, such as "three things the government can do about inflation" or "three ways the oil prices in the Middle East are hurting this country." The students were not asked to argue, state their opinions, or synthesize or analyze concepts, but only to remember what the teacher said, especially on tests.

Discussion

By studying what actually went on in two different classrooms with different teachers and different subject matter, but with some of the same students, it was possible to see that subject matter is interwoven into the social organization of classrooms inextricably and inseparably. A way of conceptualizing the differences in the two classrooms is to use the metaphor of figure and ground relationships—which aspects are in the foreground (i.e., are the center of focus) for both teachers and students and which are in the background.

In the mathematics class, subject matter was in the foreground (figure) and social organization was in the background (ground), while in the social studies class, the figure was the expectations that the



bilities, and the ground was the subject matter. The mathematics teacher looked at subject matter from the perspective of his students—how they conceptualized it, what was difficult for them, and how they could make use of it. His concentration was on subject matter and his students having successful experiences with it, but he always had what he called "an underlying awareness" of classroom discipline and potential behavior problems.

In the social studies class the teacher had great difficulty moving beyond an overwhelming awareness of his expectations about the way the students would behave and their limited capabilities. This became his central focus or figure, and all of his planning was centered around activities he could do to keep them busy and attentive. His decision to use whole-group teaching strategies reflected his desire to be in control of the flow of activities and information, but this flow was highly susceptible to student and other interruptions. His focus on activities rather than content and his willingness to make the work easy by reducing the social studies concepts to memorizable facts indicated that his major concern was student behavior rather than subject matter. Although students' test scores showed that they learned many facts and concepts about the various areas of social studies, they had very little exposure to the overall structure of the subject matter--those understandings that provide a broad perspective or unity to the body of knowledge. It was fragmented by interruptions and a series of often unrelated activities. As a result, the teacher's instructional process or teaching decisions affected the knowledge



itself, and his primary goal was not to focus on the student learning or achievement in social studies as much as it was to survive and get through the day.

The figure in each class was also evident in the way the students spoke to me in both formal and informal interviews. They spoke of the math class as being "a pretty good class." They were able to list the topics covered and to speculate about why the teacher had chosen certain problems and not others. However, they apologized for "the language" we had heard in the social studies class (referring to students' swearing) and for other students, aberrant behavior.

Moreover, none of the five taking both classes could remember anything other than major topics covered in the social studies class. Neither were they able to link the subject to anything they had ever taken in either elementary or middle school.

Conclusion

The two teachers had differing goals, expectations, classroom organizational structures, and ways of getting students to cooperate and participate. These factors influenced the teachers' choices, the depth to which they could present subject matter, and the messages subsequently communicated to students. The relative positions (whether figure or ground) of the subject matter and the social organization in the two classrooms, therefore, affected the students' opportunities for learning.

Reference Note

1. Doyle, W. The tasks of teaching and learning in classrooms. Invited address at the annual meeting of the American Educational Research Association, San Francisco, 1979.

Reference

Bossert, S.T. <u>Tasks and social relationships in classrooms</u>: A study of instructional organization and its consequences. Cambridge: Cambridge University Press, 1979.